report

I Data structure

std::vector

□ Algorithm

Use top-down algorithm

- Recursively call maxPlanarSubset function by three cases. Memorize the max number of chords in the subset in vector M and the cases in vector case path.
- 2. Recursively call findChord function to trace back and store the endpoints of each resulting chord in vector resulting_chord_set.

- 1. I used bottom-up strategy in the beginning and it had poor performance in large input cases. The time complexity is $O(n^2)$.
- 2. I used map to store the given endpoints of each chord at first. This did not perform well in large input cases as well. The time complexity is $O(n^2)$.
- 3. After changing the algorithm and data structure, it still had problem on the last input case. I spent almost a night to debug. Finally, I try to run on another workstation. Surprisingly ,it works and finish within 3 minutes.